

REMARKS/ARGUMENTS

This Amendment is being filed in response to the Final Office Action dated October 14, 2008. Reconsideration and allowance of the application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-22 are pending in the Application.

In the Office Action, claims 1, 2, 5-11, 13-15, 17 and 18 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 6,633,651 to Hirzalla ("Hirzalla") in view of U.S. Patent No. 5,436,653 to Ellis ("Ellis"). Claims 3, 4, 16, 19, 21 and 22 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over Hirzalla in view of Ellis in further view of U.S. Patent No. 7,103,222 to Peker ("Peker"). Claims 12 and 20 rejected under 35 U.S.C. §103(a) as allegedly being obvious over Hirzalla in view of Ellis in view Peker in further view of U.S. Patent No. 6,29,817 to Ahmad ("Ahmad"). It is respectfully submitted that claims 1-22 are allowable over Hirzalla in view of Ellis alone and in view of any combination of Peker and Ahmad for at least the following reasons.

Hirzalla shows an apparatus that receives (emphasis added) "an incoming video stream consisting of sequences of successive frames,

creating on-the-fly digital signatures in accordance with a predetermined algorithm ..." (see, Col. 1, lines 40-42). The digital signatures of each of the selected frames from the video sequence "collectively form a signature file for the sequence ..." (See, Col. 1, lines 52-54.) Accordingly, Hirzalla is clear that digital signatures for the stored video stream are created from successive streams. In other words, the stored signatures are based on streams that are successive and therefore, do not overlap.

Hirzalla then (emphasis added) "compare[s] one or more stored signatures to a candidate live or recorded video stream to find a match. The candidate signature is created in the same manner as the stored signatures, except that in the case of the candidate sequence, the signature is created "on-the-fly", i.e. on a real-time basis. The candidate signature is a moving signature. This means that it is created from successive overlapping groups of frames." (See, Col. 2, lines 13-20, cited in the Final Office Action.)

Accordingly, while Hirzalla shows overlapping groups of frames for the candidate video (the sample video), the stored signatures are of successive, non-overlapping scenes.

Similarly, Ellis shows a system that computes signatures based on individual video frames (see, Col. 12, lines 11-21). For detecting new segments, Ellis scans cues and picks out overlapping segments to ensure that a new segment is detected (see, Col. 38, 46-60). Accordingly, Ellis like Hirzalla uses overlapping segments for candidate/test segments, however, computes stored signatures based on non-overlapping portions of the video segments.

It is respectfully submitted that the apparatus of claim 1 is not anticipated or made obvious by the teachings of Hirzalla in view of Ellis. For example, Hirzalla in view of Ellis does not disclose or suggest, an apparatus that amongst other patentable elements, comprises (illustrative emphasis added) "a video content storage that stores at least one video stream; a scene defining processor that defines overlapping scene intervals in the at least one video stream; a signature processor that computes a scene signature for each of the overlapping scene intervals, the video content storage storing the scene signatures of the at least one video stream; a selector that selects a scene signature which is descriptive of video content of a scene a user wants to view; a comparator that compares the selected scene signature with scene signatures of the stored at least one video stream to identify one

or more scenes whose scene signature is similar to the selected scene signature; and a player that plays the at least one scene whose scene signature is identified as similar to the selected scene signature" as recited in claim 1, and as similarly recited in claim 17. Each of Hirzalla and Ellis show storage of signatures from individual frames and utilize a group of signatures to identify a portion of the stored video sequence. Each of Peker and Ahmad are introduced for allegedly showing elements of the dependent claims and as such, do nothing to cure the deficiencies in Hirzalla in view of Ellis.

Based on the foregoing, the Applicants respectfully submit that independent claims 1 and 17 are patentable over Hirzalla in view of Ellis and notice to this effect is earnestly solicited. Claims 2-16 and 18-22 respectively depend from one of claims 1 and 17 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of the claims.

For example, Hirzalla in view of Ellis in further view of Peker does not disclose or suggest, an apparatus that amongst other patentable elements, comprises (illustrative emphasis added) "the scene signatures of the stored at least one video streams stream

are constructed using principal components vectors, the principle components vectors being computed by principle component analysis of selected low level features of the video content within the scene" as recited in claim 3, and as similarly recited in claims 12 and 20. While Peker does show principle component analysis, Peker does not disclose or suggest signatures constructed from principle component vectors.

Accordingly, separate consideration of each of the dependent claims is respectfully requested.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

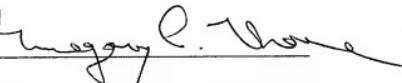
Patent

Serial No. 10/540,313

Amendment in Reply to Final Office Action of October 14, 2008

Applicants have made a diligent and sincere effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited.

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December 15, 2008

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